Grade Level: 6-7

Subject Areas:
Science and Social Studies

Duration:
Pre-visit: 1-2 hours

Visit: 1 day

Setting:Classroom and Mission Espada

Skills:

Science: 6.14B Identify relationships between groundwater and surface water in a watershed.

Social Studies: 7.10A Identify ways in which Texans have adapted to and modified the environment and analyze consequences of the modifications.

- Charting the Course:
  Prior to this activity, students
  should become familiar with
  underground and above ground
  water sources.
- Essential Terms: water source, *acequia*, well

#### **STRUCTURE**

Big Idea
Where were the water
sources located in a
mission?

### **Objectives**

Students will:

- Identify the location of water sources at their school
- Locate 4 wells and the acequia on a map of Mission San José while working in small groups
- Locate and map the well and acequia at Mission Espada during a visit

### **Making Connections**

Water has always been a primary consideration in the location and establishment of any settlement. The Spanish pattern of colonization typically utilized surface water and a system of acequias (irrigation ditches). This assured inhabitants of a centrally located, convenient and dependable water source.

Eventually, wells and then modern underground plumbing systems were added to mission lands which are used today. Additionally, there are

farmlands that still depend on the missions' *acequia* systems for irrigation.

#### **Materials**

one per team of 2-3 students

Exploration (pre-visit):

map of Mission San José

Elaboration and Evaluation (visit):

map of Mission Espada

## Engagement (Pre-visit):

Have students identify the location of water sources at school.

## Exploration (Pre-visit):

Discuss the concepts of central location and convenience. Working in teams, have them locate four (4) wells and the acequia on the map of San José.

# Explanation (Pre-visit):

Students should be able to identify where the water source is and what the source is (i.e. underground or above ground). The acequias run beside the walls of the missions and wells were dug within the mission compounds.

# Elaboration and Evaluation (Visit):

Students will locate and map the water sources at Mission Espada. Include the well and *acequia* 



